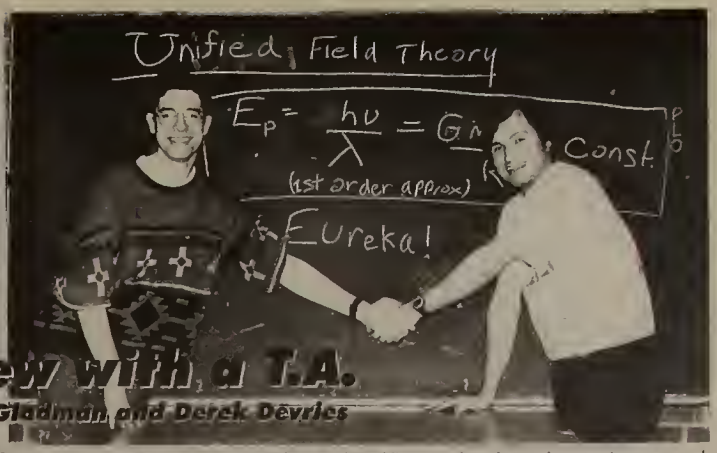
the Cannon
JANUARY 14TH, 1997
VOLUME XIV ISSUE V
AN OFFICIAL NEWSPAPER OF THE UNIVERSITY OF TORONTO ENGINEERING SOCIETY



WHAT'S INSIDE

Editorials
- *In Support of a Murderer*
- *Education is a right, not a privilege!*

Skule™ News
- *A New Way of Learning*
- *Tuition Update*
- *Stanland!*

Special Report
- *Money for Your Value*
- *Top Ten T.A. Responses*
- *Speak now, or forever keep your T.A.*
- *Teaching Assistants on Strike?*
- *Stanland!*

Eng Soc Reports
- *President's Report*
- *VP External Update*
- *Professor Evaluations in the Cannon?*

Godiva Week
- *Godiva Week Events*
- *Godiva Week Schedule*
- *The Rules of Ye Olde Grande Chariot Race*

Career Centre
- *Career Trends*
- *How to Get a Summer Job!*
- *WOMEN's ISSUES CHAIR Needed!*

Philosophy & Arts
- *Green*
- *Course Announcement*
- *Horoscope*

Movie Reviews
- *Mars Attacks*
- *Jerry Maguire*
- *Ghosts of the Mississippi*
- *Hamlet*
- *Evita*
- *The English Patient*
- *Michael*
- *Video Reviews*

The Final Word
- *Cannon Poll*
- *EAA Stats and Scores*

Interview with a T.A.

Featuring Aviv Gladman and Derek Devries

by Gina Seto ENG SCI 9T9

With another set of blue TA evaluation forms off to the hidden pool of "assessment" files, we the students often reminisce over the good times (or bad times) that we had with our T.A.'s. Such a word, T.A., was almost completely foreign to us until our collective university experience; a post secondary education phenomenon. Worthy of study? It certainly merits a chat with a couple of experienced TA's. We spoke to two TA's - Aviv Gladman and Derek Devries - both of whom have TA'd for the department of electrical and computer engineering, and are U of T engineering graduates.

Gina: What do you enjoy about TA'ing?

Aviv: The glamour, the excitement, the frequent flyer miles... Actually, I have enjoyed TA'inging quite a bit more than I had initially expected to. If you can help one student who is struggling along, you really feel like you have made a difference. There is also a great deal of learning to befound in being a T.A. You don't really understand something until you teach it to others.

Derek: Giving really low marks.

Gina: How has your view of T.A.'s changed upon becoming "one of them"?

Aviv: My views probably haven't changed too much. Thinking back to the T.A.'s I had as an undergrad, I'd say at least half of them were of no help to me,but now I realise that we never provided them with any feedback, so howcould we expect anything to change?

Derek: Not much...but then I never paid much attention to them in undergrad

Gina: Do you ever put in extra (unpaid) hours?

Aviv: I'm sure that I have, but I couldn't give you numbers. TA hours aren't clocked, and there are numerous preparatory hours before going into the classroom that most professors do not allot hours for in the job description.

Derek: Most definitely, marking has to get done, and we don't leave lab at 6:00 on the nose....

Gina: As a TA in Engineering, do you feel overpaid?

Aviv: On the whole, no. I have been overpaid for TA'ing some courses and underpaid for TA'ing other courses. In the end, it pretty much balances.

Derek: Not if you consider the overtime hours, or look at it as payment for the term, rather than as an hourly rate. Besides, most people, in engineering anyway, TA for extra money, not as a way to get by, so unless the pay is attractive they just won't bother.

Gina: Why aren't there any language requirements to become a T.A?

Aviv: There are language requirements. The same that applies for any student. Theoretically, any student at the university, graduate or otherwise, has to be fluent in English. It's a pity there isn't an *oral* examination. Just because you can write a good essay for the EPT doesn't mean you can speak the language. Similarly, just because someone speaks English well, doesn't mean they are effective communicators. I'd like to say the reverse is also true, but I've never met a T.A. who spoke English poorly and was effective in communicating to a class. In my *opinion*, T.A.'s should be interviewed to make sure they can speak english well. If they can't, that doesn't mean they shouldn't be allowed to TA, it means that they shouldn't necessarily be given contact hours (i.e.. They can mark!).

Derek: That's a tough one. I agree that communication is the most important skill a TA should have. But you walk a thin line when you start saying "you don't speak English well enough to get the job.... Profs try to put these TA's in mark-only roles.

Gina: TA's can get courses that they haven't taken before, why?

Aviv: First choice is always supposed to go to people who have taken the course before, but I suspect this is not a hard and fast rule. They usually look for *equivalence* in any event (i.e.. If you took first year Eng Sci Elec, you're qualified to teach first year regular Elec). Plus, sometimes profs prefer to have their own Grad students T.A. their courses, but in such cases it is usually because the professor feels the student is qualified.

Derek: The application process (for ECE) is quite simple, just fill out a "I want to T.A." form and enter a prioritized list of courses you would be willing to teach. Professors and administrators then hash it out matching people to courses. Profs, of course, try to choose the people they know are competent.

Gina: Have you ever come across any cases of harassment?

Aviv: Which way? I've never heard of TA's being harassed by students, but I suppose you never know.

(Cont'd on pg. 4)

What Godiva Stood For

by Aviv Gladman, edited by Ryan Morris ELEC 9T9

So the Engineer's annual week of revelry is upon us once again. That's right: Godiva Week is here! Some of you are probably wondering why the heck some naked lady on a horse is so important to the Engineers. While there is no historical evidence to suggest that Lady Godiva actually rode nude through the streets of Coventry, many poets and artists have told her story. The most famous version was written by Alfred Lord Tennyson. Her husband threatened to raise taxes, and the people were upset. In protest, Lady Godiva rode butt-naked through the streets of Coventry to show her husband how strongly she opposed the taxation. On a side note, it is generally believed that the historical Lady Godiva did not ride naked on the horse, but rode without saddle or bridle. The inaccuracy of Tennyson's story has been attributed to the phrase "mount your horse naked" in the original account of the ride. Sorry boys.

"AS A WOMAN, I WOULD DEFINITELY NOT RIDE NAKED ON A HORSE."
-RYAN MORRIS ELEC 9T9

As to Godiva's connection to engineering, it has been suggested that Godiva was a mascot of the British Artillery Corps in World War II, and that tradition was passed to Canadian artillerists serving with the British. When the artillerists returned to school after the war, they brought Godiva with them. However, there is no historical evidence to support this. The city of Coventry has no knowledge of Godiva's use by the British army and has never heard of any connection between Godiva and engineering. The origin of the symbol remains a mystery.

Lady Godiva has much to teach engineers. Her story is one of self-sacrifice and devotion to the public good. Lady Godiva is the embodiment of those character traits that are required of every professional engineer. She understood that her duty to the public was paramount, beyond her feelings and desires. In this way, although not connected to engineering, Lady Godiva symbolises many of the virtues for which we as engineers should aspire. As Tennyson writes: "She did more, and underwent, and overcame."

the Cannon

EDITOR
Albert Lee

ASSISTANT EDITOR
Karen Virk

LAYOUT EDITOR & HEAD GRAPHIC ARTIST
Stanis Yu

PHOTOGRAPHY
Michael Bonert,
Margaret Cyrzan

LAYOUT AND GRAPHICS
Julian Dunn, Vera Kan,
Elfreda Lau, Kenneth Lun,
Felix Tang, Vincent Tang,
Benjamin Wong, Mae Yuen

CONTRIBUTORS
Martin Bright, Steve Dennis,
Julian Dunn, Xavier Galvez,
Aviv Gladman, Binh Ha,
Teresa Huang, Franny Jewett,
Terry Johnston, Kern Lewin,
Siv Maharaj, Ryan Morris,
Alex Paradi, Lucy Pegoraro,
Dan Popadynec, Gina Seto,
Becky Smith, Carole Song,
Paul Westergaard

SPECIAL THANKS TO
Julie Wilkinson
Weller Publishing Co.

and

COMMUNICATIONS CHAIR
Christian Bosio

ADS MANAGERS
Paul Andersen
Christen Taylor

Established in 1977, THE CANNON is a monthly publication of the University of Toronto Engineering Society, with a circulation of four thousand copies throughout the University of Toronto St. George Campus. The mandate of THE CANNON is to publish information that is pertinent to the interests of the engineering student body.

Subscription information is available from Julie Wilkinson at the Engineering Society at (416) 978-2917.

For advertising rates, production deadlines, and other information please contact Engineering Communications office at (416) 978-5377.

PLEASE NOTE
THE CANNON is a medium through which undergraduate engineering students can express their opinions. The views expressed herein are those of the author and do not necessarily represent those of the editors or the Engineering Society unless so indicated.

CORRESPONDENCE
The Cannon
Editor-In-Chief
10 King's College Road
Sandford Fleming Building
Rm. B670
Toronto, Ontario M5S 1A1
Tel: (416) 978-5377
Fax: (416) 978-1245
e-mail: *cannon@skule.ca*

Editorials

To Live and Learn

by Karen Virk ELEC 979

Once in a while, humans come forth with an exceptional and revolutionary thought that forever changes the course of humanity. One of those ideas was the seemingly innocuous revelation, education is a right, not a privilege. A wonderful, radical concept that provided a gift of knowledge for billions. Freedom to know and to learn and to contribute to society, to truly make a difference. The right to be able to do so. This is the concept that ushered in the technically opulent twentieth century and provided the luxurious lifestyle that us Westerners enjoy.

How ironic that it is in the time in which we most enjoy the benefits of education that we revert back to the primitive ideas we once held concerning education. How sad it is that the once magical meaning of education has been lost among dollar signs and the general apathy of those whose ancestors once fought for the right to learn. Today education is not even close to a priority for either society or individuals in general. It is something that is sneered at by some and callously used by others. At this level of society, one cannot go a day without hearing of more cutbacks and still more ways of diluting what education the younger generation receives. Government cutbacks and irresponsible handling of funds are decreasing the value of education and making it more and more difficult for those who want education to obtain it. Education has ceased to take precedence over issues such as economic and commercial gains.

As a result, education is once again a commodity affordable only to the rich. With the deteriorating status of public schools, more and more wealthy parents are turning to private education where students can be taught at an arguably higher level. In terms of higher education, tuition has almost doubled in the last four years and will continue to rise to impossible levels so that it is quite possible that education will be virtually unattainable to those not of extremely high financial status; once again, leaving the accident of birth to determine the potential level of education a person can receive.

Perhaps the most disheartening aspect concerning education is the apathy of those who have the opportunity to fully experience it. Most often the love of learning is overshadowed by either an economic desire or a general lack of appreciation for knowledge. Knowledge in no longer gained for enriching one's spirit, rather it is gained for enriching one's bank account. Rarely do students pursue a path in education that they would enjoy more as opposed to one that will help them get a better job. It is a sad state when knowledge has lost the power to capture the appreciation and value of humanity. Education has been corrupted and perverted into just another tool in a seemingly endless array of ways to make money.

Stanland by Stanis Yu ENV CHEM 979

KFC FINALLY DISCOVERS THE SECRET TO THE PERFECT FRIES!

Defeating the Lowest Common Denominator

by Albert Lee COMP 979

On December 26th, 1996, the 6-year old beauty queen JonBenet Ramsey was found bound, raped, and strangled to death in the basement of her own home. One might say this is just another tragedy against children but there's more: there exists a greater tragedy. Unlike other crimes against children, the victim was the criminal. Names and faces are not important; what she stood for, is. You see, JonBenet was not a regular girl. She was Little Miss Colorado 1995, a little girl with the makeup, the dress, the "womanly" look. You see, it's not who she was but rather what she was and represented and that's why I support the murderer.

I'd like to point out that I am a reasonable man. I do not support the actions of criminals and I am in full support of the justice system. I do believe that once the murderer is caught, he should be tried and sentenced. Have I gone mad? Am I spewing nonsense? Have I really gone off the deep-end? No. One must remember that I do not support his grizzly act of rape and strangulation and instead, I am concerned with the underlying issues. That is to say, I am concerned with what the girl represented and to that end, what influence she had on society.

Today, we have achieved a reasonable level of equality between the sexes. While it is not perfect, it has given women the same rights, the same jobs, and even the roles as men. Growing up, girls now have strong and powerful role models. And yet with JonBenet, we've stooped so low. With all that we've accomplished, we still manage to reduce an innocent child to such a low common denominator: a piece of meat. Is this the fruit of our labour? Is this all that we've managed to do? I hope not. Unfortunately the worst part is, she's not unique. Others look to her as both a role-model and even an inspiration. She, and others like her, are setting the bad examples for future generations. *That's* the worst part.

Tomorrow will be another day. Will our fight for equality be worth it or will it just be another hopeless cause? Only time will tell. Soon enough, the murderer will be caught and the issue of JonBenet Ramsey will be put to rest. But will it soon be forgotten? I hope not. We must learn from these mistakes and raise our children in light of these lessons. Perhaps an equality will be found. But then again, history repeats itself.

Important Cannon Dates

THE NEXT ISSUE OF THE CANNON WILL BE AVAILABLE ON FEBRUARY 4TH. IF YOU WOULD LIKE TO HELP WORK ON THE PAPER, YOU CAN ATTEND THE WRITERS' OR THE LAYOUT MEETINGS ON JANUARY 16TH AND JANUARY 23RD RESPECTIVELY. BOTH MEETINGS WILL BE HELD IN ENG COM (IN ENG 50C, 1F B670) AT 5:00PM. YOU CAN ALSO SUBMIT AN ARTICLE, PHOTO, OR PIECE OF ARTWORK INDEPENDENTLY. THE SUBMISSION DEADLINE IS JANUARY 27TH. PIECES CAN BE DROPPED OFF IN THE CANNON MAILBOX (IN ENG 50C) OR THEY CAN BE E-MAILED TO CANNON@SKULE.CA. REMEMBER TO INCLUDE YOUR NAME, DISCIPLINE AND YEAR.

Skule™ News

Concurrent Engineering Provides the Edge

by Xavier Galvez COMP 9T9, Binh Ho ELEC 9T8, Franny Jewett CIV 9T7 and Lucy Pegoraro INDY 9T8

Concurrent engineering! Could this be the basis of how future engineers will be educated? It contrasts heavily to traditional engineering, which describes a sequential process that relies on the product being passed from one department to another, very much like Taylorism. Concurrent engineering relies rather on creativity and teamwork to achieve results for the task at hand. Interaction and communication of ideas provide the backbone for this modern approach to design.

The concept behind concurrent engineering originated in Japan having been put into practice by its people for the past 25 years. This approach allows modern companies to overcome weaknesses in development, production, and the lack of cooperation between levels within the corporation's infrastructure. By providing essential communication between all levels of a company — management, engineers, marketing personnel, and unionized workers, concurrent education provides for a more efficient company. If not overcome, these weaknesses lead to poor design and hence, a less competitive product.

One solution introduced by concurrent engineering to amend the lack of interaction is the concept of co-location, where a company is based in one location with all departments contained in the same building. An example is the re-engineering of Chrysler's new 'head office.' By applying the concept of colocation, employees find it easier to communicate ideas with each other. Supporting this concept are studies which show that 85% of new, innovative ideas are spawned by casual interaction.

Only after the last six years has concurrent engineering been developed into a program that can be taught in universities. The pilot program, instigated by Mr. Denis Proulx, Ing., is now being taught at the Universite de Sherbrooke in Quebec. Mr. Proulx describes concurrent engineering as a systematic and multidisciplinary approach that simultaneously integrates the different phases of product development and the management of its process. These phases are: identification of customer needs, specification of product performance requirements, design of the product and its manufacturing processes, and fabrication of the product while considering the entire product life cycle (including distribution, support and maintenance, and recycling or disposal). Courses incorporated in this program range from coordinating teamwork to maximizing creativity. Marketing courses are integrated with engineering courses, based on Mr. Proulx's ideas of emphasizing the collaboration of marketing and engineering in the design of a product. Such concepts are not usually taught in traditional engineering courses, and yet such ideas are dogma in concurrent engineering.

Major U.S. companies such as Ford and Xerox have applied concurrent engineering in their respective industries, but the concept has yet to expand to Canada. With market globalization, negative consequences may arise for all countries producing goods and services that reject these progressive concepts. With its emphasis on teamwork and creativity, concurrent engineering is a program that can prepare future engineering students to develop new products and be at the leading edge of industry!

HSL ESSAY CONTEST!

Presented by: The High School Liaison Committee and the Faculty Liaison Office

Deadline: Friday, January 17th, 1997 @ 12:00 pm (End of Godiva Week)

PRIZE: One $150 gift certificate from the U of T Computer Shop.

Goal: Write an essay (about 200 words) for the future HSL web site (letter style preferred) offering advice to high school students and prospective applicants on the following topic:

"The 'Soft Skills' acquired through extracurricular activities are as important to potential employers and to your survival at Skule™ as the 'Hard Technical Skills' taught in class"

Note: Reference to Engineering Society and other on-campus activities preferred.

Conditions: Contest open to all current U of T Engineering Students.

Submissions and inquiries can be directed to Dan Popadynec (co-chair of HSL Committee) or dropped in the High School Liaison Mailbox in Eng Soc.

Note: Submissions should be in a Word or text document (IBM 3.5" floppy disk or e-mail Dan at *popadyn@ecf.toronto.edu*).

Stanland *by Stanis Yu ENV CHEM 9T9*

Tuition Update

by Lucy Pegoraro INDY 9T8

ESSCO (the Engineering Student Society Council of Ontario) presented a paper to Mr. David C. Smith - the Chair for the Advisory Panel on Future Directions for Post Secondary Education on our ideas about the way the provincial government is cutting funding and suggestions on how we can improve our education. This Advisory Panel was hired by the provincial government to investigate ways to save money on a post-secondary level.

ESSCO got feedback from every engineering school about ways that money could be saved, and about increasing the "worth" of our education. Here is a synopsis of their findings based on feedback from every school (this feedback was conducted by Engineering Societies in council meetings - based on the issues stated below) and research they conducted regarding Engineering Education in Ontario.

Affordability By Students:

The government is proposing to replace OSAP with Income Contingent Loan Repayment Plan (ICLR). This new loan scheme would be structured so that students would pay back their loans as a percentage of their income. Also, currently OSAP applicants can only get loans with demonstrated financial need.

Engineering Students stated that:

> We recommend that an Income Contingent Loan Repayment Plan be implemented in the Province of Ontario given that this program be accessible to all students, irrespective of financial background.

We urge the Ontario Government to consider the out-of-province students while implementing the ICLR program.

Fee Policy And Sharing Of Costs:

Students' Tuition Fees

The Advisory Panel suggested that a tuition scheme be implemented based on anticipated future income. As stated in the ESSCO paper, it is believed that students pursuing engineering and other high income disciplines should not be punished for pursuing these degrees. Therefore, it was stated that:

> We believe that all students in entry-level undergraduate programs should pay a standard base fee. Lab fees (or any other additional fees) should be clearly identified and then paid on top of the standard base fee.

Private Sector Sources

The Advisory Panel suggested that industry could help universities with their funding. While being an excellent learning tool for students, the high quality projects produced by students also generate new ideas and solutions for the companies.

Engineering students suggested that:

> We agree that further incentives, such as the following, should be pursued:
> - improved tax incentives for donors
> - partnerships with businesses and industry for the sharing of equipment or training facilities
> - initiatives involving the matching of donations

We also recommend that the government play a role in the coordination of industry supported projects for university students.

Reducing Duplication Of Programs

It was determined that it may be essential to "merge" programs where there is extensive duplication in one area. Also, it must be considered that "over-specialization" does not occur. This will lead to a loss of diversity on university campuses across the province. It was also stated that individual faculties would lose contact with, and understanding of, other programs.

After a discussion of these issues, it was determined that:

> Engineering students believe that reducing duplication of programs is an effective way to decrease costs for the universities. However, we urge the government to carefully consider the possibility of over-specialization of the universities.

It should be noted that the province will not be making any new cuts to the universities and colleges in 1997 - 1998. Last year, the province cut $400 million last year, which in turn cut $53.9 million from U of T's operating budget. John Snobelen, Minister of Education and Training, stated that he would do his best to avoid any further cuts to universities. I am sure most of you are relieved!!!

If you would like a copy of the ESSCO paper (The Engineering Student Perspective), or The Advisory Panel's paper (Future Goals for Ontario Colleges and Universities), please email me at *engsoc@ecf.utoronto.ca*. KEEP YOURSELF INFORMED!!!

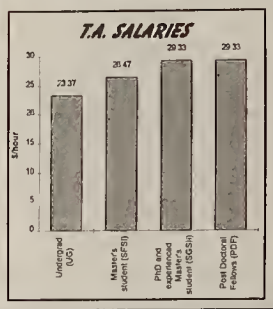
Special Report

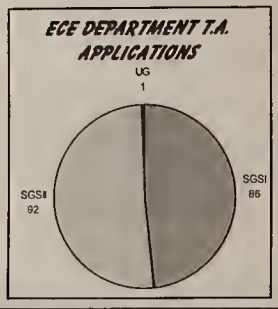
Money for Your Value

by Gina Seto ENG SCI 9T9

The following T.A. composition is relevant to the ECE department T.A.s only.

Out of 179 applicants: 86 were SGSI category and are master's students; 92 were SGSII category and are NOT all PhDs since a Master's student can be paid at the SGSII category after two years of master's work. One student was an undergrad.





Top Ten T.A. Responses

by Aviv Gladman (T.A.) and Friends

10. Do you want to come up here and teach the tutorial?
9. It's pretty obvious, isn't it?
8. You don't need to know that until fourth year.
7. Don't worry, it won't be on the exam/test/quiz.
6. I'm going to leave this problem as an exercise for you...
5. I'm not going to do your homework for you.
4. It's in the textbook.
3. Ask the prof., s/he makes more money than I do.
2. What do *you* think?
1. Trust me.

Are Our Comments Being Heard?

by Gina Seto ENG SCI 9T9

Lousy T.A.s are not unheard of around these parts. Granted, "lousy" is a very subjective kind of a judgement to make. Nevertheless, should any student find cause to say such a thing about his/her T.A., their department wants to hear about it!

The blue sheets at the end of each semester are _not_ the only means of reporting unhelpful, incompetent, or insulting T.A.s. Take immediate action by talking to the very nice people who take care of the T.A.s in their respective departments or by talking to your professor. Very few complaints come through to the ECE department, the largest engineering T.A. employer, likely because students have not been confident about complaining. Maybe an average of two or three a year come through to lodge grievances.

Every T.A. has a personal file. Protected by the union, a hired T.A. that is not working at an acceptable level is almost impossible to fire. That is why much effort is put into rehabilitating wayward T.A.s.

Once a department has feedback from the student body that a T.A. is not performing up to par (or is not acting responsibly with regards to respect for the students), the department will take immediate action to contact the T.A.'s supervisor. The problem will then be discussed with the T.A. in a pro-active manner, the goal being one that will correct the problem and add to the T.A.'s experience.

The onus is on the students to provide feedback immediately, for the benefit of the T.A., and all their students to follow.

Interview with a T.A.

(Cont'd from pg. 1)

Derek: You mean students abusing T.A.'s....constantly. Seriously though, no-one around here remembers any.

Gina: If there is a shortage of T.A.'s, some departments allow fourth year students to do it. Is this wise?

Aviv: In my opinion, no. I can't see how there is ever a shortage of grad students, since there are usually the same numbers each year. I don't know if ECE ever gives classes to fourth years, although it was pretty common in Aerospace Engineering when I was a student. Frankly, I think that it's a little weird having a fourth year as a T.A. In theory, they should be qualified to T.A. *only* first year and second year *fundamentals* courses. Anything that is way beyond the scope of a fourth year (you don't really *learn* anything until the middle of 2nd term, 4th year, when everything suddenly 'clicks'.) Just my opinion.

Derek: Not in thesis term, but in principle there is nothing wrong with a 4th year T.A.'ing any of the 1st year "general courses" (statics, intro. to computing/chem)

Teaching Assistants on Strike?

by Gina Seto ENG SCI 9T9

How many students know that University of Toronto T.A.s, including those illustrious serving in Engineering, work under a union? In fact, the Canadian Union Public Employees, Local 3902, recently represented our T.A.s during discussions for a new T.A. contract. These talks with the administration negotiators broke down, necessitating later talks with a Ministry of Labour conciliator to mediate.

What is the cause of such dissension? Apparently, it's not coming from the ranks of Engineering T.A.s. Could it be that the CUPE does not truly represent our T.A.s in Engineering? If so, then why does our Faculty have to be subjected to the consequences of someone else's battle?

A vote to strike is forthcoming this spring and the forecast does not look promising. In the not too distant past, a similar choice had to be made and the strike was voted down; arguably due to the large Engineering turnout at the voting polls. According to one of the larger Engineering departments, their T.A.s in general did not support the past two strikes and therefore were available to work. Those who did support the strike however, were replaced by others who were able to fill in. However, in the event of a lockout by the University (a strong possibility for the upcoming strike), T.A.s are not legally allowed to work during the strike whether or not they belong to the union.

It appears that most of the union grievances are coming from the teaching assistants from Arts and Science and not the Engineering T.A.s. Wages, for instance, are under constant contention mainly because Arts and Science T.A.s seldom receive funding from their department and often rely on their T.A. job to get by financially. Engineering T.A.s, by contrast, almost always get funding from their supervisor as graduate students, and may regard their T.A. wages as extra income. Job assurance is another primary concern outside of Engineering, where positions are not as bountiful.

Another difference between the two groups is the role that they play with respect to the course. Teaching Assistants in Arts and Science are quite often required to teach material not covered in the lectures. This is not usually the case in Engineering, where T.A.s are generally there to support and enhance understanding of the course material. Such differences in these two coexisting groups again raise the point; are our T.A.s' interests truly being reflected with the CUPE?

I sincerely doubt it.

The answer seems easy: Separate from the Arts and Science T.A.s and represent Engineering as a separate body. Unfortunately the solution is nowhere near as simple. The overwhelming paperwork and administration that ensues is a thankless task that nobody qualified has been willing to undertake.

Strikeout.

Back to square one.

If conciliation is ineffective, the next step for the union is a strike vote. It may be used to simply strengthen the union's bargaining position or to create a mandate for an actual strike. A T.A. strike in Engineering will benefit no one, least of all, the undergraduate students. During past strikes, the professors have taken over the tutorials and labs to the best of their ability. Looks like we have... an end-of-pipe solution.

BE PART OF THE OLYMPICS! THE ESSCO OLYMPICS

Get your class or bunch of friends together for a fun filled weekend at the Olympics!!!

PRESENTED BY: ESSCO (Engineering Student Societies Council of Ontario)

DEADLINE: Wed. January 15th (Sorry about the short notice - if it is after Jan. 15, come talk to us anyway!)

WHO? Everyone is welcome.

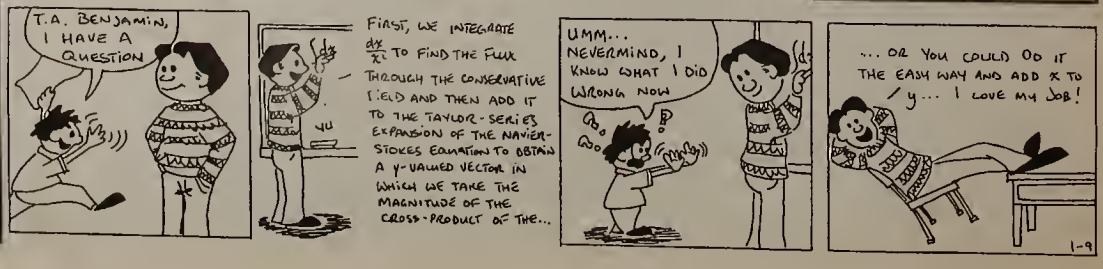
WHERE? At Queen's University

WHEN? The weekend of January 31 to February 2.

HOW? To register contact Franny at *president@skule.ca* or put a note in the President's mailbox in Eng. Soc.

COST? This trip will cost $60 if you need to stay in a hotel, or $25 if you are staying elsewhere.

Stanland by Stanis Yu ENV CHEM 9T9


T.A. BENJAMIN, I HAVE A QUESTION
FIRST, WE INTEGRATE dx/x² TO FIND THE FLUX THROUGH THE CONSERVATIVE FIELD AND THEN ADD IT TO THE TAYLOR-SERIES EXPANSION OF THE NAVIER-STOKES EQUATION TO OBTAIN A Y-VALUED VECTOR IN WHICH WE TAKE THE MAGNITUDE OF THE CROSS-PRODUCT OF THE...
UMM... NEVERMIND, I KNOW WHAT I DID WRONG NOW
...OR YOU COULD DO IT THE EASY WAY AND ADD X TO y... I LOVE MY JOB!
1-9

Eng Soc Report

VP External Update

by Lucy Pegoraro INDY 9T8

I hope everyone had a very prosperous holiday season. I am sure you are all immensely excited to be back in school!!!

Here is a synopsis of what has been happening on an External level.

Conference and Competitions Update:

The Ontario Engineering Competition (OEC) is being held at McMaster University in Hamilton on February 14th to 16th. There are 6 categories that you can compete in: Entrepreneurial Design, Corporate Design, Team Design, Editorial Communications, Explanatory Communications, Parliamentary Debate, and the Team Design (for 1st and 2nd year students only). If you are interested, please email Thadd Nettleton at *nettlet@ecf.utoronto.ca* before January 14th.

If you win at the OEC, you are able to compete at the Canadian Engineering Competition (CEC) in Moncton, New Brunswick (at the University of New Brunswick) from March 6th to 9th. It would be a great opportunity for all to show what an academic student body U of T Engineering has.

Tuition Update:

Please see the article in this Cannon for a synopsis of the way Ontario Engineering students feel about these cuts.

Next update, I will talk about the Canadian Congress of Engineering Students that was held in Sherbrooke, Quebec from January 2nd to 8th. There were a lot of positive things that happened at this conference, so STAY TUNED!!!!

Faculty Council Report

by Paul Westergaard ELEC 9T9

Over the last month, the faculty representatives and I have been compiling teaching evaluations on each Professor teaching in the past term. Our goal is to publish these comments in The Cannon soon. Also on the topic of improving instruction, I am planning to look into more frequent Professor-student meetings as a means of input to the instructor during a course. Franny Jewett and I are also organizing another Oral Communications Course in the upcoming month. Please watch for the announcements regarding this course. I'd like to send out very special thanks to all the faculty representatives for their help with the evaluations! Good luck to everyone this term!

President's Report

by Franny Jewett CIV 9T7

How many of you remember the green questionnaires that were filled out during classes over the last few months? Half of you should remember them vividly! The questionnaire completion rate was 50%, higher than we've had at any Engineering Society events in the last few years. I hope this is an indication of your enthusiasm in the "New Engineering Society"!

Comments from the questionnaires ranged from very positive to quite the opposite and most of them can be summed up into six categories:

- *What is "The Society"*
- *The Society does a pretty good job*
- *I just don't have time for extra-curricular involvement*
- *It seems like I never know what's going on*
- *Lose the nerds in Eng Soc*
- *I don't care*

Did you get a chance to comment? If not, please see me in Eng Soc, leave a note in my mailbox or email me at *president@skule.ca*.

We are planning to have workshops to brainstorm on the direction in which the Engineering Society should be heading. Everyone is asked to attend.

PLANNING SESSION #1
WEDNESDAY, JANUARY 22
12-2 in GB 202

DAMN IT, COME TO SUDS

Super-duper Godiva Week

SPECIAL on Durango

THURSDAY JAN. 16th:
FREE Passes to the Joker

FRIDAY JAN. 17th
FREE Passes to the PHOENIX

CANNONBALL

The Engineering Semi-Formal

Saturday
January 18th, 1997

Toronto Colony Hotel

89 Chestnut Street
Toronto, ON

Cocktails 6:30pm
Dinner 7:30pm
Dancing from 9pm

Tickets: $30 per person
includes 4-course meal
with wine and 1 drink ticket

Tickets on sale: Monday Jan 13th onwards
from noon to 2pm in the SF Atrium or EngSoc

Get yours soon, this one sells out fast!

Godiva Week

Godiva Week Events Blue & Gold Committee

Godiva Week has arrived! The Engineer's annual week of fun and frivolity has arrived once again. Drive away those January Back-to-Skule™ blues with numerous events including:

Snow Baseball and Rugby
The Annual Mr. Blue & Gold Pageant
Eng Soc Dunk Tank
Euchre, Brisk, and Dominos Tournament
Gotcha!
Godiva's Quest
F!rosh Hard Hat Decorating Contest

and the biggest event of them all...
Ye Grande Olde Chariot Race!

This is your guide to this week's mayhem, so come on out, get involved, and have fun!

Godiva's Resurrection:

The official beginning to Godiva Week. See Lady Godiva's actual coffin paraded around. Special guest appearances will be made.

Snow Baseball and Snow Rugby:

What needs to be said? Tuesday and Wednesday at lunch – Sports in the Snow! Bring your glove and your boots and have some fun. Sign up on Monday in the Atrium.

Eng Soc Dunk Tank:

Dunk the main men and women of the Engineering Society (and any other volunteers) in this event on Friday at Suds.

Calculus Races:

Think you know Calculus? Come and try out your integration and differentiation skills against your peers, and have a few BEvERageS at Suds while you're at it.

The Annual Mr. Blue and Gold Pageant:

That's right ladies: See the men of Skule™ strut their stuff, show their boxers, tell a bad joke, and drink a

Chariot races at Godiva Week 877!

BEvERage at the Annual Mr. Blue and Gold Pageant Wednesday evening during Suds.

Gentlemen: Everyone is free to enter, show the ladies of Skule™ what you've got. Judges have been known to be enticed by generous praise and gifts of (almost) any kind. Sign up Monday. The Pageant consists of four parts:

1. The Bad Joke:
The worse the better. No Bnad jokes allowed, they're too terrible to hear.
2. The World Issues Question:
A philosophical and in depth probe into life and its meaning. A bullshitting contest for sbort (Engineering, Society, and the Environment a good preparation).
3. The Boxer Short Ensemble:
This is where you guys get to strut your stuff on the runway. Your outfit should have a theme about yourself or a celebrity, but the boxer shorts must be visible to the judges. Participants should have a half page description on themselves or what they are wearing or leave it to the hostess to improvise (bad idea).
4. The Surprise Event!

The judges will consist of a panel of Skule™ women whose decision is final (but has known to be swayed by certain pressures).

F!rosh Hard Hat Decorating Contest:

Remember that pristine yellow hard hat you received during F!rosh week? Well now it's your turn to fix it up like the upper years. Bring in your hard hat for judging Tuesday night at Suds. Prizes awarded for best designs. Another opportunity to outdo your friends. Beware, artsies will see you on the subways so travel in groups for security.

Ye Olde Grande Chariot Race:

The event of the year: come on out and support your discipline (unless you're F!rosh, then support the F!rosh). Thursday at lunch, the chariots roll. Always a big draw, and a big show.

T-Square Mini Putt:

No golf clubs here, just real balls. Mini-golf in the atrium. Free! Tuesday evening.

Euchre/Brisk/Dominos Competition:

Find a friend to cheat with!

Gotcha!:

The assassination game. Only one person will remain standing on Friday. Submit your name and hunt down your fellow Skule™Mates. Everyone receives a name and year of an individual, then must find that person and stick a piece of tape or paper onto the back of that person. Once you "kill" someone, then you take their target person. This continues until the remaining people come to Suds on Friday and have a showdown.

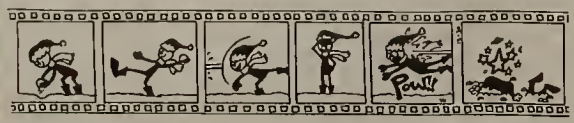
Godiva's Quest:

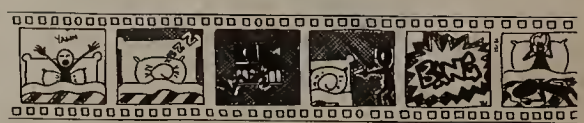
Something is hidden on campus. A new clue will be revealed in the Engineering Society each day of Godiva Week. Solve, retrieve and win a prize!

Godiva's Wake:

The official end to Godiva Week. Party it up at Suds, then out to the Phoenix with all the engineers to invigorate us for the new term.

Time/Day	Monday, January 13th	Tuesday, January 14th	Wednesday, January 15th	Thursday, January 16th	Friday, January 17th
LUNCH (12:00-2:00pm)	Sign-Up for Godiva Week Events in the Atrium	SNOW BASEBALL SNOW RUGBY	SNOW BASEBALL SNOW RUGBY	Chariot Race: 12:15: *Front Campus*	Mario's Bakery presents CAR SMASHING!
3:00 pm and on...	SUDS: The Engineering Pub Open Every Day @ 3:00!				
EVENING 5:00pm and on...	Sign-Up for Godiva Week Events in the Atrium; Godiva's Resurrection!	F!rosh Hard Hat Competition; Calculus Races; T-Square Mini Putt	The Annual Mr. Blue and Gold Pageant!	Euchre, Brisk and Dominos Tournament; Joker Passes Available at Suds	EngSoc Dunk Tank (With Special Guests: SAC!); Godiva's Wake! PHOENIX Passes Available at Suds
WEEK LONG EVENTS	Sign-Up for Gotcha! In the Atrium; Godiva's Quest: Clue #1	Pick-Up for Gotcha! Names; Godiva's Quest: Clue #2	Gotcha! Begins...; Godiva's Quest: Clue #3	Gotcha! Continues; Godiva's Quest: Clue #4	Gotcha! Winner Declared; Godiva's Quest: Boy, are you dumb.





Godiva Week

The Rules of Ye Olde Grande Chariot Race

1. Eligibility

Each discipline and the First Year Engineering Class (which includes the surviving Eng Sci F!rosh), the SAC's Blue Crew and the Kampus Kops (Mice or Meese) are entitled to enter one (1) chariot or other wheeled contraption that shall be presented by the respective Chair of the discipline immediately prior to the start of the Race.

Each chariot shall abide by the following rules and measurements. Some Groups may be required due to meet other requirements due to previous rule infractions. These groups will be informed of the specific needs.

2. Chariot

Each chariot shall have:

i) at least two (2) accessible wheels attached to the chariot, with no human contact whatsoever, which must be on the ground throughout the Race from start to finish. Minimum wheel diameter is 152.4 mm.

ii) no sharp protruding points or other objects dangerous to participants, i.e. knives, cutting torches, barbed wire, electric shockers, guns, bombs, ICBM's, squid, fish, pig's heads, crossbow's, OJ, etc.

iii) no maximum weight limit. Minimum weight of chariot is 13.6 kg (without driver)

iv) human propulsion only (no gas motors, sails, horses, transcendental meditation, etc.)

At the start of the Race, each chariot will be pointed out to its competitors by the Judge. (If you wonder why this rule exists, or think it is silly, then you haven't seen enough Chariot Races!!!)

3. Drivers

Each driver (charioteer) must be:

i) Human or near-human (at least 33% male or female), or,

ii) A member of the Engineering Society with a valid student number at the University of Toronto.

Note: if the driver is not a member of ENG SOC, he must be Marco Santaguida SAC president or a reasonable hand drawn SAC Commissioner, or a licensed Mouse in uniform. The Driver must be at least eighteen (18) years of age or seventeen (17) or under and accompanied by an adult. The Driver must be contained within the chariot at all times throughout the entire Race and may not propel him/herself or the chariot during the Race. The Driver must be presented to the Judge before the Race by his/her Club Chair or representative.

4. Pushers and Pullers

Only eight (8) persons allowed per chariot. All must be human or near-human males/females. If the police arrive, all pushers are asked to flush their stash.

Participants are required to attend SUDS afterwards to brag about their exploits.

5. Blockers

Offensive and defensive - no limit. All must be human or near-human males/females. This means YOU creep!!!

6. Offence and Defence

Rule 1 (ii) applies to all contestants as well as chariots. It is hoped that contestants will abide by the intent of this rule which is designed to prevent loss of life, limbs, eyes, masculinity/femininity, etc.

Corollary: Anyone using axes, axe handles, baseball bats, knuckle dusters, cat o' nine tails, bike chains, pepper spray, handcuffs, billy-bats, biochemical, morning stars, harpoons, riot shields, cross-bows, nuclear weapons etc. shall automatically bring about the disqualification of his or her discipline's chariot. Blockers may not carry dangerous objects such as materials made out of metal, glass, wood, and/or plastic. Biodegradable materials that decompose in two (2) years or less are permissible, such as eggs, tomatoes, watermelons, etc. (note to Eng Sci: animal parts do not decompose in two years - not even seafood). No aerosol cans, smoke bombs, flames, or other pyrotechnics may be used by contestants or attached to chariots. All contestants are reminded to behave in a sportsmanlike manner (like in NHL hockey games).

7. The Course

The course of the Chariot Race is one lap counterclockwise around the scrap of grass beknownst to all as Front Campus. All chariots are required to proceed around the course outside of the course markers as designated by the Judge.

8. The Time

The Official Date of the 1997 Chariot Race is Thursday, January 18, 1997. The Race shall commence at approximately 12:15pm of the aforementioned date. The start of the Race shall be marked by the roar of the MIGHTY SKULE™ CANNON.

9. Increment Conditions

Weather conditions must include at least two of the following:

On the ground:

i) ice
ii) snow
iii) slush
iv) mud
v) yellow grass
vi) Ashok Soni

In the air (sent by God or a reasonable hand-drawn facsimile):

i) freezing rain
ii) snow
iii) hail
iv) live chickens
v) a shrubbery
vi) Alex P. Ross

10. Winner

The first chariot to cross the finish line with at least two wheels touching the ground and still capable of rotation, and a driver still breathing (oxygen/helium) and as human as he/she was at the start of the Race, will be declared the winner if it meets all of the following qualifications. To qualify to win, the chariot must:

i) Complete the course as laid out by the Judge.

ii) Cross the finish line with at least two rotating wheels still attached to the chariot and touching the ground with no human contact or help.

iii) Have a charioteer who has been contained in the chariot all the time it has been moving. A chariot without a charioteer must stop moving until it has retrieved its charioteer. It may only retrieve its charioteer by moving backwards with regards to the course direction.

iv) The charioteer who was contained in the chariot at the sound of the MIGHTY SKULE™ CANNON, and who has been declared by the owners of the chariot to the Judge before the Race, must be the charioteer at all times throughout the Race, and when crossing the finish line as set out by the Judge.

v) The charioteer may not move more than 921 mm + 0.02% (three feet) on the ground or in the air if he or she is not contained in the chariot during the Race between start and finish. For the chariot to move any further, he/she must be placed back into his/her original position in the chariot of his/her original designation.

vi) Not be the First Year Chariot.

vii) Not be any Out-Of-Faculty (OOF) Chariot. Especially not the SAC chariot, or the Mice (unless they are packing heat).

11. The Prize

The winning team will receive the J. P. Potts Memorial Trophy plus some other unknown prize.

12. Inspection

The chariots shall assemble on Front Campus at 12:05 p.m. sharp on the day of the Race for inspection by the Judge. Nothing can be added or subtracted from the chariots after the inspection.

13. Disputes

The Judge is hereby declared to be infallible. Consequently, all arguments shall be decided by the Judge whose decisions shall be final (see The Rise and Fall of the Roman Umpire).

14. Wavers

Each disciplines is allowed an unlimited number of people to wave at the participants.

15. Waivers

All blockers, pullers, and charioteers must sign the waiver forms before the Race.

Anyone who has read these rules and/or participates in the Race hereby acknowledges the element of risk involved to his/her own person - and shall not hold the Blue and Gold Chair, the Engineering Society, the University of Toronto, or any other individual or institution responsible for the consequences of his/her own actions and/or decision to participate.

All spectators within a two hundred yard radius of the racing field are also bound by this rule. Any complaints shall be addressed to:

Lloyd Axworthy
Minister of Human Resources
Development
14th floor
140 Promenade du Portage
Hull, Quebec, K1A 0J9

16. Protective Apparel

All charioteers are required to wear protective headgear. All other participants are strongly encouraged to wear the same (How can all these people wear the same clothes?).

17. Loans

All chariots stolen, or otherwise removed or damaged, must be returned in their original condition (judge's discretion) no later than 10:00 a.m. the day of the Race or the thieving discipline will be disqualified.

All alterations made to said chariots must not be irreparable or the offending team will be immediately disqualified and treated in an extremely nasty fashion.

18. Judge

The sole Judge of the Chariot Race shall be the current Blue and Gold Chair. Two other persons may be appointed Assistants to the Judge. The Judge and the two Judge Assistants must be students of the Faculty of Applied Science and Engineering at the University of Toronto and must not be in the same course or have the same first initial or astrological cosine. In addition, two other judge positions will be auctioned off during the charity auction during Godiva Week. The Judge can disqualify a chariot, even if it finished the Race first, if it has broken any of the above said rules.

The winner can be declared at any time after the Race - but a champion must be declared before March 15, 1997. Once a champion is declared, the decision is final. If, upon declaring a winner, any discipline falsely claims to have won the Chariot Race immediately preceding, they shall be reprimanded by the Blue and Gold Chair and made to provide items pursuant to Rule 19 below in order to lift the sanctions automatically imposed arising from such deception.

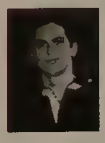
The rules can be changed 48 hours before the Race by the Blue and Gold Chair only.

19. Bribes

Only "liquid" assets will be considered as legal bribes. All other bribes are illegal, but in keeping with the spirit of competition and sportsmanship, will still count. Bribes should be submitted to the Blue and Gold Chair personally at least two (2) hours before the start of the Race. No conditional bribes will be accepted (well yes they will be but not honored).

Note: Judges work better when fully fueled!

Signed, this 12th day of January, 1997:



Steve Dennis
Blue and Gold Chair
1996-1997

Career Centre

Career Trends

by Terry Johnston, Engineering Liaison Coordinator

Virtual Career Fair

The Engineering Liaison Office will be hosting a Virtual Career Fair in March of this year, providing engineering students with additional opportunities for employer contact. All of the elements of an Engineering Career Information Day will be put online. Engineers will be able to take advantage of 24 hour access to employer information for a one week period.

This initiative has been made possible through the use of the profit from last year's highly successful Engineering Career Information Day. The money is being used to employ two engineering students to develop the Virtual Career Fair web site. Access to this site will be restricted to University of Toronto engineering students because this is engineering money.

Initial response by companies to this new venture has been positive. One company, Anderson Consulting, is interested in providing assistance and possibly resources for this project. Progress to date includes discussion with Anderson and the hiring of two students to set up the site.

Stay tuned for further details!

The Engineering Liaison Office was created in 1985 to market the benefits of hiring University of Toronto engineers and to promote the services of the Career Centre to engineering employers.

Contacts:
Terry Johnston
Engineering Liaison Coordinator
Phone: (416) 978-8022

Anne Eto
Employment Committee Chair
Phone: (416) 978-2917

E-mail: *career@ecf.utoronto.ca*
Visit the Career Centre's web site at *http://www.utoronto.ca/uofi.html*

How to Get a Summer Job!

Started searching for a summer job yet? If not, don't put it off another day. This year's summer job market is already heating up with salaries in the $8 - $15 an hour range. In order to find a summer job, especially an engineering related one, it is important to remember the following:

Know Yourself

To sell yourself to a potential employer you need to know what skills you have to offer, as well as your strengths and weaknesses. Engineering students often overlook including transferable skills in their resumés even though engineering employers consistently put these skills on their top ten list of skills sought. Visit the Career Resource Library or participate in one of the Career Centre's Skills and Options Workshops if you are unsure of how to complete a thorough skills assessment.

Know the Market

Ninety percent of available summer jobs are never advertised. To find unadvertised jobs try networking; talk to friends, professors, neighbours and relatives. Find out if they know people in companies or industries in which you are interested in working. Create a list of network contacts, review our summer job search binders for potential contacts, conduct speculative mailings, go on information interviews, and research potential employers by using the many resources available at the Career Centre.

Know How to Market Yourself

You need an effective resumé and covering letter to promote yourself to employers. Your resumé and covering letter demonstrates to potential employers that your skills and abilities match their needs. Examples of skills sought by employers today include: communication skills, initiative, leadership potential, teamwork ability, interpersonal skills and self-confidence. Be sure that you include these skills in addition to your technical skills. For a professional looking resumé attend a Resumé and Covering Letter seminar, offered at the Career Centre. If you already have a resumé, make an appointment to have it critiqued at the Resumé Clinic.

Know the Value of any Summer Experience

Allow some flexibility in your summer job search: if a full-time position doesn't materialize, consider part-time or temporary work. If you want to work for a particular company, think about accepting a less prestigious position. Remember, the contacts you make this summer working in the shipping department may lead to an engineering position next summer. Consider volunteering as this is a good way to get career-related training and make contacts while helping others. Another possibility is starting your own business. There are a variety of sources of information and financing for students wishing to set-up their own summer businesses.

Begin your job search early and seek assistance in developing your resumé writing and interview skills. With a lot of work and a little luck, your summer job search will payoff. Not only will you be earning money but gaining experience that will prove useful when seeking full-time continuing employment. Good luck with your search!

HEY F!ROSH . . .

LOOKING FOR A SUMMER JOB?!?

Find out how to get one at the . . .

Engineering Summer Job Search Seminar

Date: Wednesday, January 22, 1997
Time: 4:00 - 6:00 p.m.
Place: Mechanical Building, Room 102

(Hear it from the experts!)

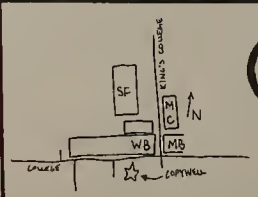
Presented by the Career Centre and Eng. Soc.
Pre-Register at the Career Centre Summer Desk.

Do You Want To Be An Executive of the Engineering Society?

There is now an executive position open in the Engineering Society! The Women's Issues committee needs a new Chair. Both males and females are welcome to apply. The specific duties of the Women's Issues committee are as follows:

- The Women's Issues Committee shall be specifically responsible for issues that concern women in Engineering.
- The Women's Issues Committee shall plan and administer the Women's Orientation Activities during Orientation and other social activities that pertain to the Women's Issues Committee except for those covered by the Social Committee and the Blue and Gold Committee.
- The Women's Issues Committee chair shall attend all Engineering Society Executive and Full Council meetings which are each held monthly.

Anyone is welcome to apply for this position. Please forward a brief description of yourself and why you want the position to Franny (email *president@skule.ca* or President mail box in Eng Soc) by Wednesday January 22. If you have any questions please ask any Engineering Society executive.



Copywell
Digital Imaging & Commercial Print

185 College Street
Toronto, Ontario M5T 1P7
(416) 979-2942
1-800-COPYWELL

Fax: (416) 979-1835
E-mail: copywell@idirect.com

Philosophy & Arts

Green...

by Teresa Huang GEO 979

I often talk to her. Although some of my friends tell me that it is unnatural for me to have such conversations with her. I value her opinion, although lately, she has begun to shock me more and more. Somehow, her assertiveness weakens me and strangely, I am frightened by her increasing strength.

I do not remember how and where we met. What I do remember, is how repulsed I was when she first entered my life. He didn't mind her though, I can almost say that he welcomed her presence. Funny, I wasn't even the least bit jealous. Perhaps it was because I had other things on my mind, other things being how to cherish every moment I had with him, who was over a hundred kilometres from me most of the time, at a different university. Not only was our relationship a long distance one, it was also frowned upon by people terribly important to me. That made everything even more difficult, and more agonizing because I felt that it was my duty to please everyone involved in this issue. I didn't want to choose between him and my family, and it pained me dearly when I was pressured by both sides to make a decision. I missed the days when spring was merely the time for me to smell the crisp ironic sunlight, and enjoy the little pleasures that only someone as simple as I could enjoy. And the summer was spent dancing in thunder storms in bare feet, and walking under green shades listening to the wind whisper in my ears. Perhaps that is how she was able to enter my life so silently. Perhaps I was so busy dealing with my emotions as well as my work, that I hadn't noticed her slipping in like a shadow, so liquid yet so ruthless.

She was charming. She dazzled into my consciousness when I pined to love, yet my conscience kept me from seeing my love. She cooed and comforted me. I seemed almost submissive and meek in comparison to her calculative mind and intricate thoughts. She enabled me to see him despite those who were against it, and I therefore turned my attention towards her every move. She disgusted me. She never lied to anyone, only misled. And I am yet to see a trickle of remorse in her dark and watery eyes. She was smart, and so intriguing, and I watched as she fluttered among the attention lavished onto her from our friends. How she laughed and giggled, how she then turned and winked at me. It was like a tacit understanding, she was naked with me. No matter how conniving she was towards the others, she exposed her thoughts to only me. How I abominated knowing her intrinsic character. I did not respect her, yet I needed her. I needed her thoughts and plans to enable my meeting with him. He felt guilty for causing my attachment to her, yet he did not do a thing to stop the development of our new friendsbip. Perhaps he was beginning to love her. Still I was not alarmed nor jealous. Perhaps I was just naive, but somehow, watching her do all the insidious deeds that I would never think of was too intriguing to relinquish. Perhaps I was beginning to love her.

Now, the bond between us seemed to have deepened. I often wondered why she chose silly little me to have this profound and almost inseparable friendship. Then I wondered, perhaps everyone had strange yet more powerful friends like she was to me. In truth, I still hate her tendency to prevaricate on occasions, and her charming smile when I know that deep down, she didn't feel like smiling at all. She never ceased to amaze and sometimes horrify me. Nonetheless, I find myself trusting her more and more, and I somehow feel weaker and weaker as I see her becoming more confident in the circle of friends that used to be just mine. She still laughs and giggles and charms our friends, but now when she turns and winks at me, I see more than the tacit understanding that used to be there. I see a hint of frost, and it makes me even weaker. I feel myself wasting away as more springs and summers go by. I see her growing stronger, and although she still consults me in certain matters when we choose to converse, now in private, it hurts me to realize that she is not at all concerned about my wasting away. All I can now see is her back, so liquid yet so ruthless... Do you suppose that he will miss me when I am finally all gone?

Looking at the reflections in the mirror, I see myself smiling back at me. So charming a smile and so confident, although I do not feel like smiling at all. The board awaits me, and I have many people to impress. I must convince the committee that my ideas are worth their consideration, even if I have to mislead them a little. I have a faint idea that I am supposed to feel a little guilty about this, and I would have been, had I been in my greener days of youth. Then I will go home tonight, to my dearest husband, who still jokes about that boy I used to date in university. What was his name?

Course Announcement

The Colorado State University is pleased to offer new Environmental Engineering Courses as part of their curriculum. For additional information, please contact: Thomas G. Sanders, Program Co-ordinator, Environmental Engineering, Colorado State University, Fort Collins, CO 80523. Fax: (970) 491-7727; Tel: (970) 491-5448; E-mail: TGS@lance.colostate.edu

Design of Water Quality Monitoring Networks

The short course, presented annually since 1979, will be presented June 9th to the 13th, 1997, at Colorado State University, Fort Collins, Colorado. It will present detailed procedures for design of any monitoring system, regardless of the location of the water in the hydrologic cycle. The information goals covered include ambient conditions, trends, and excursions beyond a limit. Following a review of basic statistics, the Short Course will address the use of statistics in the analysis of water quality data and the ramifications of such analysis on the design of the entire monitoring system. These ramifications involve sampling frequency, measurement techniques, data reporting formats, data storage and retrieval methods, and sampling locations. Analysing and redesigning an existing monitoring network will be emphasised citing case studies. In addition, biological monitoring and non-point source monitoring, both urban and rural, will be covered. A case study on combining the efforts of 51 separate, monitoring agencies into a state-wide monitoring co-operative will be presented. A framework for evaluating different monitoring systems, the subject of our most recent PhD dissertation, will be covered as well.

The short course is directed to persons actively involved with the design, operation and/or management of a water quality monitoring network for both surface and subsurface monitoring. The Short Course is developed assuming that attendees will have little or no background in statistics. Each attendee will be furnished with a text written by the course instructors, Design of Networks for Monitoring Water Quality, a copy of our software WQSTATH and a user's manual. Attendees should bring a calculator as it will be needed during the problem sessions. For additional information, please contact: Thomas G. Sanders, Program Co-ordinator, Environmental Engineering, Colorado State University, Fort Collins, CO 80523. Fax: (970) 491-7727; Tel: (970) 491-5448; E-mail: TGS@lance.colostate.edu

Activated Sludge Process Control Short Course

The 9th annual short course to be presented July 14th to the 18th, 1997 in beautiful Estes Park, Colorado will present the methodologies and laboratory techniques to generate process control parameters for operating an activated sludge process. Application of the process control methods can result in improved efficiency of the activated sludge process and savings of thousands of dollars annually in operating costs alone. *The course will be valuable to: 1) engineers and other* professionals who design, operate or manage activated sludge treatment process. Invited speakers include: Mr. Ron Schuyler, Mr. Lynn Marshall, Dr. Michael Richard, Mr. John Esler, and Mr. Bob Hegg. For additional information, please contact: Thomas G. Sanders, Program Co-ordinator, Environmental Engineering, Colorado State University, Fort Collins, CO 80523. Fax: (970) 491-7727; Tel: (970) 491-5448; E-mail: TGS@lance.colostate.edu

Hazardous Materials/Waste Managers Training Course and CHMM exam

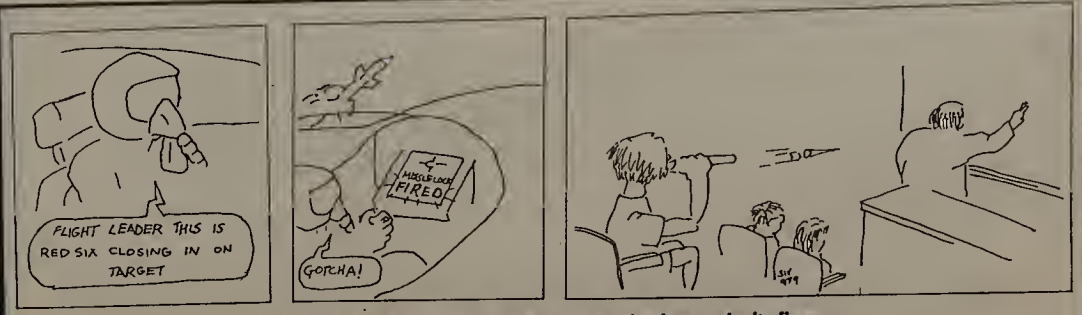
The course to be presented June 17th to the 19th, 1997 at Colorado State University, Fort Collins, Colorado, integrates the bazardous substances, materials, and waste (HSMW) sections of the applicable federal regulations and helps minimize liability from HSMW handling. Our goal is not to make technical experts of our students, but rather to increase their abilities to adequately manage HSMW and to pass the CHMM certification exam. RCRA TSCA, CERCLA, HMTA, SARA etc. are laws that the environmental manager must deal with daily. Your company or institution is faced with the monumental task of compliance with these laws. Also, there is potential for increased personal and company liability from the improper handling of hazardous substances, materials, and waste (HSMW).

The student should be well versed in at least one area covered in the course. The preferred student is an environmental manager for industry, state regulator, or consulting engineer. A college degree in engineering, industrial hygiene, chemistry or other related science is helpful but not required.

For additional information, please contact: Thomas G. Sanders, Program Co-ordinator, Environmental Engineering, Colorado State University, Fort Collins, CO 80523. Fax: (970) 491-7727; Tel: (970) 491-5448; E-mail: TGS@lance.colostate.edu

Horoscope

by Siv Maharaj ENV CHEM 979



Today your creativity draws unexpected attention from authority figures.

Movie Reviews

by Becky Smith ENG SCI BIO MED 97B

Welcome Back! I had plenty of opportunity to view some films while I was home for the holidays. The night life in St. Catharines is fairly limited. I can now share with you what I learned from this experience:

1 Trendy flicks are ALWAYS appreciated

"Mars Attacks" (various stars, directed by Timothy Burton) is an excellent example of this. Box office sales were huge for what is pretty much an average movie. Although it was entertaining in parts and mostly funny, the spunk only comes from the concept of a big budget "B" movie. It may all be worthwhile just to see Jack Nicholson play a slimy Vegas character or a body-less Pierce Brosnan.

2 Marketers who appeal to both the stereotypical male and stereotypical female will often succeed

"Jerry Maguire" (Tom Cruise, Rene Zellweger) illustrates the point beautifully. A romantic comedy plot with Tom Cruise as the leading man appeals to me and many of my female friends. As well, the characters are easy to identify with even though some feel that Jerry Maguire is a shallow character. To appeal to the male half of the crowd, the movie is packed with football clips as Jerry works hard to become a wealthy sports agent. Seriously though, this movie has something for EVERYONE and is lots of fun to watch. My favorite line is when the football player lead says to his wife in as romantic as way as possible, "Honey, you're the shit!"

3 Mississippi was and still is a state full of racist, murderous hicks

Or at least, this is how it is portrayed in yet another Mississippi-bashing movie. "The Ghosts of Mississippi" (Alec Baldwin, Whoopi Goldberg, James Woods) reinforces this conception again by presenting a plot nearly identical to other films that we have already seen. In fact, the movie takes not only a familiar theme but practically the same storyline from "A Time to Kill" and "To Kill a Mockingbird". The work of Whoopi, Alec, and James is outstanding but the writers could have done much better on the script. In the end, the audience has many questions about significant details of the story that were omitted instead of having the feeling that any conclusion has been made.

4 Toronto has a much better selection of films than St. Catharines

Once back in Toronto, I could see the movies I have been waiting for (since it never made it to the little town of my birth!) Many of us have been anticipating the arrival of "Hamlet" (directed by Kenneth Branagh who also plays Hamlet, various cameos) and were not disappointed when we finally got to see it. A somewhat surreal rendition of Shakespeare's play, "Hamlet" starts off a little slow but definitely picks up. There were a few minor spots that I found less than spectacular, but when you consider that the whole thing was 4 hours long, those spots were pretty insignificant. Yes, it really is 4 hours long, since Kenneth wanted to keep every one of Shakespeare's lines in the movie. Don't worry there is an intermission! I would suggest however, that only those people who enjoy reading Shakespeare venture out to see this movie.

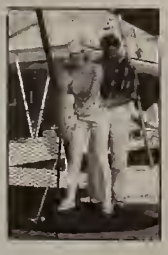
Video Reviews

(a.k.a. the other movies Becky watched over the holidays)

Breakfast at Tiffany's (1963, Audrey Hepburn)
An old movie with a timeless plot. An excellent film all around!

The War (1996, Kevin Costner, Elijah Wood)
More about growing up than what the title might suggest. It's an interesting story with great character development. A great renter!

The Craft (1996, 4 talented young women whose names I cannot recall)
I liked it! A crazy film about 4 teenage witches, and how they use their new powers. It's not scary, but very entertaining.



Tin Cup (1996, Kevin Costner, Renee Rousseau)
Boring. I fell asleep. Generic romantic comedy.

The English Patient

★★★★★

by Julian Dunn COMP 07O

I've always enjoyed Michael Ondaatje's books, although they don't make for an easy read. The English Patient (the book) was so good that, as soon as I finished reading it, I turned back to page one and read it over again. There are so many nuances to Ondaatje's stories that no matter how many times I read his books, I always discovered something new that I had missed before.

That said, director Anthony Minghella wisely decided to write a screenplay that does not adhere exactly to Ondaatje's original masterpiece. Aside from the wild jumps between the past and the present, the book makes multiple references to Ondaatje's previous book, In The Skin of a Lion. Minghella's screenplay smooths the transitions between the patient's past and his present with wonderful cinematographic effects and eliminates many of the interesting, but auxiliary, incidents in the book which would stretch the moviegoer's attention span. As it stands, the film clocks in at just under three hours.

Admittedly, I was suspicious of what I initially saw to be Minghella's butchery of the script to bow down to the standard moviegoing public. I was pleasantly surprised to see that Minghella's screenplay is almost a whole different story; at times I forgot that I was watching "Anthony Minghella's adaptation of Ondaatje's book" and felt like I was just watching a really good movie. I consider the movie to be a success because it manages to leave viewers with that feeling, and not leaving them solely with making comparisons between the book and the film.

The story, set in Italy near the end of the Second World War, is told through the eyes of an unknown English patient (played by Ralph Fiennes) who was shot down near the beginning of World War II. He is cared for by Hana (Juliette Binoche), a Canadian nurse with war wounds — albeit emotional — of her own. When Hana's convoy moves on, she decides to take refuge with the patient in an abandoned Italian monastery. Shortly after, David Caravaggio (Willem Dafoe), a character from Hana's past, arrives but he is not looking for Hana — he seeks the person who was ultimately responsible for him having his thumbs chopped off at the hands of the Germans. This unusual collection of characters is completed by the arrival of Kip (Naveen Andrews), a Sikh sapper who has been assigned to bomb removal duties in the area.

Guided by Caravaggio's questions, the patient begins to relive his memories of his passionate and adventurous past before the war. Ralph Fiennes does an excellent job portraying both the patient burned beyond recognition, and of the patient's real identity as Almàsy before the war. The patient's part in the story of love and betrayal, involving his pre-war colleague Clifton (Colin Firth) and Clifton's wife Katharine (Kristin Scott Thomas), is not an easy part to play particularly since Almàsy is an extremely unusual character. Fiennes retains some of his mannerisms from his portrayal of the brutal prison chief Amon Goethe in "Schindler's List", but they are of indifference, rather than brutality.

In addition, Juliette Binoche's portrayal of Hana is remarkable — she makes us feel right at home in the abandoned monastery and adeptly shows Hana's emotional scars from the war. I have always thought of Hana as being a very "feeling" type person and Binoche plays the part very well.

It's hard to either laud or criticise the other actors and actresses because the English Patient is very much a film that means different things to different people. Personally, I didn't agree with Willem Dafoe's depiction of Caravaggio as an angry man bent on revenge for having his thumbs cut off, but to others it may add tension where some is needed.

Indeed, the English Patient is a film both for everyone and only for a select few. It is a film for everyone in that there is no real "lesson" to be learned; it's just a damn good story. On the other hand, only the few who go to see the film with an open mind will enjoy it; if you have any preconceptions about the way dramas should or should not be written, then you may be disappointed. In any case, the "damn good story" should be enough to make you go see it.

Michael

starring John Travolta, Andie MacDowell, William Hurt, directed by Nora Ephron

by Martin Bright ENG SCI 97B

As a prelude to our New Year's Eve celebrations I went with a friend of mine to see Michael, the film starring John Travolta. We knew nothing about the movie at that point: I hadn't seen any advertising or commercials for it. I was expecting to see acting akin to Mr. Travolta's performance in "Get Shorty" or "Pulp Fiction". I was very disappointed. It was a good thing that a festive evening followed this most lacklustre of motion pictures or New Year's would have been tainted with stupidly sentimental Hollywood melodrama. It was definitely one of those "nice" movies. So much for "Get Shorty". This should be enough to deter you from going to see it. You also shouldn't rent it. But just so you won't feel left out of the hype here's the plot. Two tabloid joumalists on the verge of being fired stumble upon an Angel in Iowa, attempt to bring him back to Chicago and via his "down to earth" ramblings, discover the secrets to love and happiness on their way. (Sparky, a very well trained dog and mascot of the tabloid, steals the show with his stupid antics.)

Evita

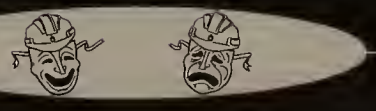
starring Madonna, Antonio Banderas, Jonathan Pryce, Jimmy Nail, directed by Alan Parker

by Carole Song ENG SCI 97B

Evita was well worth the wait! Though expectations from critics and public alike were not very high due to Madonna's past movie failures, they were forced to change their minds by the strong performance she gave as the main character, Eva Peron. Banderas himself gives a pretty decent performance and sang his parts with a lot of power (though the notes may not have always been accurately snug).

Orignally scripted as a musical (music by Andrew Lloyd webber, lyrics by Tim Rice), Evita was adapted by Alan Parker for the big screen. Evita is the true story of Argentina's first lady, Eva Peron. The movie is an autobiography of her life from her childhood until her death in 1952. She begins as an ambitious young woman dissatisfied with the life of a small town. Full of innocence and ideals, she moves to the big city and quickly rises to fame and success. At a party, she introduces herself to Juan Peron, a general in Argentina's army. After much strife due to the uprising, they are finally married...and if you watch the movie (or read about her) you can find out how the rest of her life turns out.

eb ternaitened yb lukes tine 79t



March 12-15, 1997. Hart House Theatre.

Cannon Poll Questions

Are your T.A.'s as helpful as you would like them to be?

yes ☐ no ☐

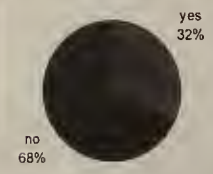
Did Godiva Week Meet your Expectations?

yes ☐ no ☐

Please detach and leave in the Cannon mailbox in Eng Soc or e-mail your response to cannon@skule.ca

Results to Last Issue's Cannon Poll

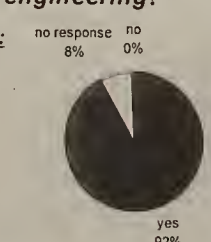
Have you been a victim of theft at Skule?



Based on 22 responses

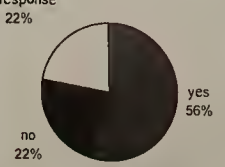
Do you think there are too few women in engineering?

Male:



Based on 13 responses

Female:



Based on 9 responses

The Sports Box

Upcoming Tournaments

Men's

Tennis Doubles	Sat. Feb. 7&8
Badminton Doubles	Sun. Mar. 16

Women's

Ball Hockey	Sun. Jan. 25
Squash	Sun. Jan. 25
Tennis Doubles	Sat. Feb. 7&8
Badminton Doubles	Sun. Mar. 16

Co-Ed

Broom Ball	Sun. Mar. 2
Tennis Doubles	Sat. Mar. 8
Badminton Doubles	Fri. Mar. 14

Winter Sports Line Up

Men's

Lacrosse	Jan 13
4-on-4 Volleyball	Jan 13
Hockey (II & III & IV)	Jan 13
Basketball (II & III)	Jan 20
Water Polo	Jan 20
Indoor Soccer	Jan 20
Squash	Jan 20

Women's

Indoor Soccer	Jan 13
Volleyball (II)	Jan 13
Basketball	Jan 20

Co-Ed

Volleyball	Jan 13
Innertube Water Polo	Jan 20

Engineering Hockey Dominates Division II

by Alex Paradi INDY 97B

WOOOOO! Weeeeee are the chaaaaampions! Nya nya nya nya nyaaaaa nya!

For the first time in a REALLY long time, Engineering hockey has won a championship. The Men's Division II team went through the season undefeated to kick some ass in the finals. The quarter and semi-final games proved to be the toughest with one of them a first overtime period win, and the other a triple overtime shootout win

A strong Division I team left us with a number of excellent players to augment our core from last year and a number of solid rookies rounded out the team. With our stellar goal tending and the leadership of our dedicated coach Mike Stevenson and assistant coach/player Marco, we had quite the season. We hope to make winning a tradition by doing so again in the upcoming spring season.

In related news, the Division I team is doing some pretty nice ass kicking themselves, going undefeated for the first half of the season. Best of luck for the second half.

NOTICE OF ELECTIONS AND REFERENDUM

Referendum for Engineering Employment Liaison and Engineering Society Elections for the 1997 - 1998 term of office for the following Engineering Society positions will take place on:

Thursday March 6th, 1997 and Friday March 7th, 1997

President
Vice-President: External
Vice-President: Finance
Vice-President: Activities
Vice-President:Internal
Engineering Athletic Association President

Nominations shall open at 9am on Monday February 10th, 1997 and close at noon on Friday February 28th, 1997.

Nomination forms may be obtained from Julie in the Engineering Society Office, SF B670 on or after February 10th. More election details in the next issue of The Cannon.